

6-Month Interim Clinical and Radiological Outcomes of
Antibiotic-Eluting Bone Void Filler for Pedal Osteomyelitis

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INTRODUCTION & AIM

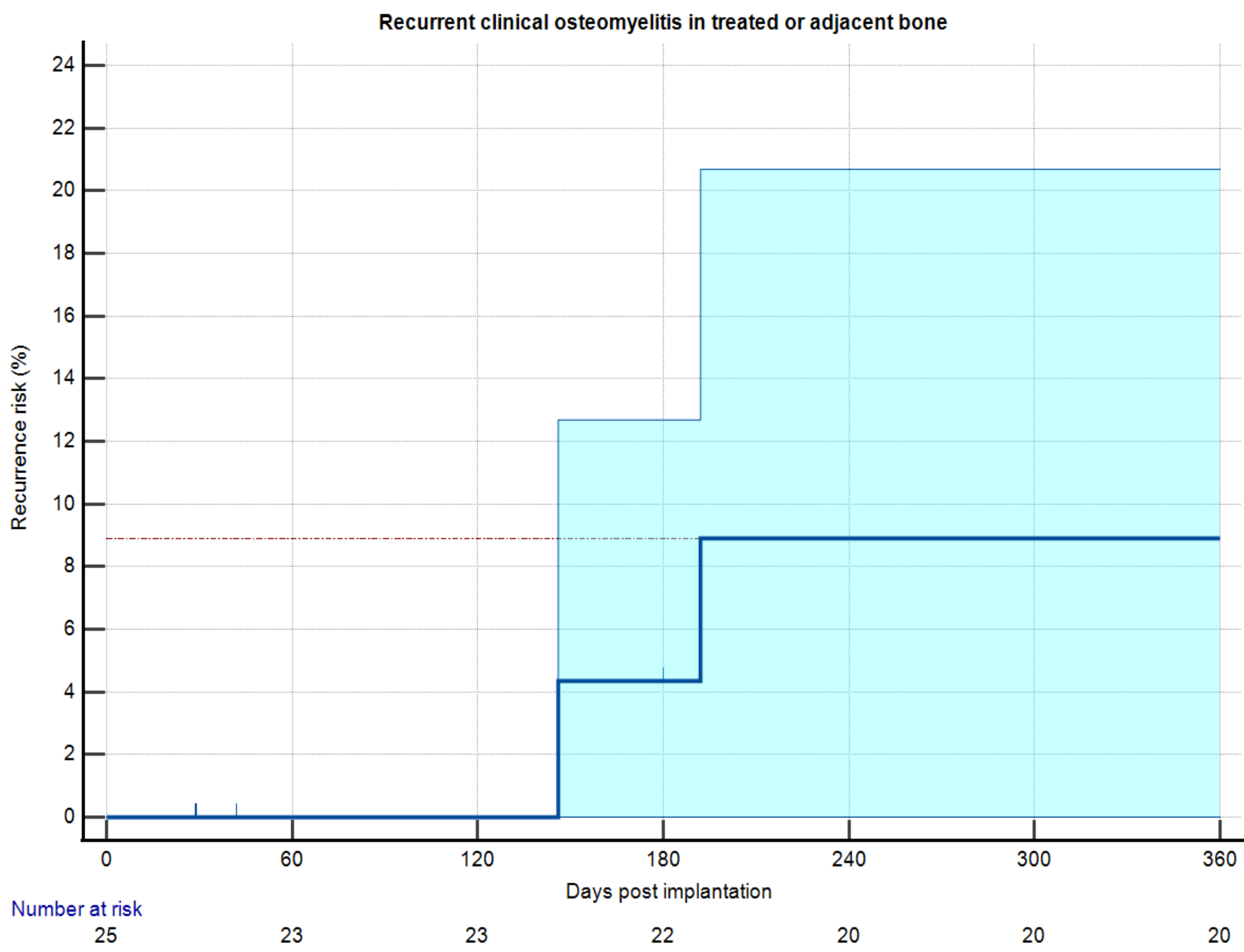
Pedal osteomyelitis remains a major challenge, particularly in patients with diabetes, peripheral arterial disease and complex wounds. Although prolonged systemic antibiotics are widely used, they carry risks of resistance and may cause treatment-limiting side effects.

Aim: to report independently adjudicated clinical and radiological outcomes in patients with positive bone samples treated with antibiotic-eluting bone void filler (AEBF).

We report the 6-month interim results of an ongoing prospective study.

METHODS

- Prospective, single-centre, post-market study of adults undergoing surgery for forefoot or midfoot osteomyelitis.
- Following debridement and, where required, revascularisation, AEBF was implanted according to proximal bone sample antimicrobial sensitivities.
- A short course of oral antibiotics was permitted for cellulitis, if needed.
- Independent clinical, radiological and quality-of-life assessment at baseline and at 1, 6 and 12 months.
- Prespecified 6-month interim outcomes: device-related serious adverse events; clinical recurrence in the same or adjacent bone; reintervention; major or minor amputation.



RESULTS

Cohort and interim follow-up

25 treated

Twenty-five patients were treated with AEBF.

68 years

Mean age 68 years (SD 12.2).

22/25 diabetes

Twenty-two patients had diabetes.

13/25 revascularisation

Thirteen patients had revascularisation.

2/20 recurrence

Clinical osteomyelitis at the same or adjacent bone at 6 months.

0 device SAEs

No device-related serious adverse events were observed.

7 days

Median postoperative systemic antibiotic duration for cellulitis

INTERIM OUTCOMES AT 6 MONTHS

Clinical recurrence at same/adjacent bone	2/20
Major amputation for recurrent osteomyelitis	0
Minor amputation for recurrent osteomyelitis	0
Device-related serious adverse events	0

Reintervention details: 1 exostectomy + repeat AEBF, 1 prolonged oral antibiotics

At the time of analysis, all 25 patients had reached the 6-month follow-up window.

RESULTS SUMMARY

No patient underwent major or minor amputation for recurrent osteomyelitis. One patient underwent exostectomy and repeat bone void filler insertion; the other was treated with prolonged oral antibiotics.

The 6-month interim analysis therefore suggests a low early recurrence signal, but final 12-month independent clinical and radiological outcomes are required.

CONCLUSIONS

In this interim analysis, antibiotic-eluting bone void filler demonstrated an acceptable early safety profile.

Low early recurrence was observed at 6 months, with no osteomyelitis-related major or minor amputations and no device-related serious adverse events.

Final 12-month independent clinical and radiological outcomes will be reported separately.

KEY MESSAGES

- ✓ Acceptable early safety profile
- ✓ Low early recurrence at 6 months
- ✓ Supports ongoing 12-month prospective evaluation

SELECTED REFERENCES

1. Venkateswaran V et al. J Foot Ankle Surg. 2025.
2. Peterlin AAN et al. J Bone Jt Infect. 2025.
3. Senneville É et al. Diabetes Metab Res Rev. 2024.

FUNDING / NOTES

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Generic terminology has been used in the poster body in line with EBJIS e-poster guidance. Product brand names for reference: CERAMENT® G and CERAMENT® V.